

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

REQU/...

To:  
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**PCT** 22 MAR. 2005

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing 17 March 2005 (17-03-2005)  
(day/month/year)

Applicant's or agent's file reference  
09923-017

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
**PCT/CA2004/002027**

International filing date (day/month/year)  
24 November 2004 (24-11-2004)

Priority date (day/month/year)  
04 December 2003 (04-12-2003)

International Patent Classification (IPC) or both national classification and IPC  
IPC 7: H02K 9/00, H02K 9/16, H02K 9/19

Applicant  
**TM4 INC. ET AL**

1. This opinion contains indications relating to the following items :

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Box No. I    | Basis of the opinion  |
| <input type="checkbox"/> Box No. II              | Priority  |
| <input type="checkbox"/> Box No. III             | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input type="checkbox"/> Box No. IV              | Lack of unity of invention  |
| <input checked="" type="checkbox"/> Box No. V    | Reasoned statement under Rule 43bis.1(a)(I) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement. |
| <input type="checkbox"/> Box No. VI              | Certain documents cited   |
| <input type="checkbox"/> Box No. VII             | Certain defects in the international application  |
| <input checked="" type="checkbox"/> Box No. VIII | Certain observations on the international application   |

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/CA  
Canadian Intellectual Property Office  
Place du Portage I, C114 - 1st Floor, Box PCT  
50 Victoria Street  
Gatineau, Quebec K1A 0C9

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/CA2004/002027

**Box No. I      Basis of this opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language which it was filed, unless otherwise indicated under this item.  
  
[ ] This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of :
  - a. type of material
    - [ ] a sequence listing
    - [ ] table(s) related to the sequence listing
  - b. format of material
    - [ ] in written format
    - [ ] in computer readable form
  - c. time of filing/furnishing
    - [ ] contained in the international application as filed.
    - [ ] filed together with the international application in computer readable form.
    - [ ] furnished subsequently to this Authority for the purposes of search.
3. [ ] In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statement that the information in the subsequent or additional copies is identical to that in
4. Additional comments :

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**WRITTEN OPINION OF THE  
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International application No.  
PCT/CA2004/002027

**Box No. V** Reasoned statement under Rule 43bis.1(a)(I) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

**1. Statement**

Novelty (N)	Claims <u>1-24</u>	YES
	Claims <u>None</u>	NO
Inventive step (IS)	Claims <u>1-24</u>	YES
	Claims <u>None</u>	NO
Industrial applicability (IA)	Claims <u>1-24</u>	YES
	Claims <u>None</u>	NO

**2. Citations and explanations :**

Reference is made to the following documents:

D1: CA 2,234,488 (Whiteley) 09 Oct. 1999 (09-10-1999)

D1 is considered to be the closest prior art to the current application and discloses (the references in parentheses applying to the cited document):

- a cooling assembly for an internal stator for an electric machine: (a modular electric motor comprising a stator unit having a cooling region Pg 16 Lines 22-26)
- said cooling assembly comprising a generally tubular body ...inserted inside the internal stator: (a stator unit having a cooling region located between each radial pair Pg. 16 Lines 25-27)
- a cooling circuit having an inlet and an outlet : (inlet and outlet passages are connected to inlet and outlet apertures Pg. 16 Lines 27-30)
- pair of bores ...define a V-shaped channel : (a cooling region located radially inward from the stator windings and having V-shaped cooling passages Fig 18)

These features are similar to those in independent claims 1,10,18 but D1 fails to include the top surface of each V-shaped passage intersecting with the top surface of another V-shaped passage and the intersections of the V-shaped channels being closed by plugs.

**Conclusions:**

**ARTICLE 33(2) PCT - NOVELTY**

The subject matter of claims 1-24 is considered novel in view of the prior art on record, thereby fulfilling the requirements of Article 33(2) PCT.

**ARTICLE 33(3) PCT - INVENTIVE STEP**

The subject matter of claims 1-24 involves inventive step under Article 33(3) PCT, in view of the prior art on record.

**ARTICLE 33(4) PCT - INDUSTRIAL APPLICABILITY**

The subject matter of claims 1-24 is considered to be industrially applicable, thus fulfilling the requirements of Article 33(4) PCT

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**Box No. VIII**    **Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made :

- In claims 1-24, under PCT Rule 6.2(b), the technical features mentioned should be followed by reference signs related to those features.

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